





## **TM44**

## **Air Conditioning Inspections**

As part of the Energy Performance of Buildings Regulations, TM44 Inspections apply to air conditioning systems for any building that have units with a combined output of 12kW or more of comfort cooling. Some process cooling such as computer server room cooling is also included in the inspection.

TM44 Inspections are legally required to be carried out by an independent 3rd party. As such, Green Zone Surveys work alongside HVAC and FM companies to deliver our inspections.

#### Why Are TM44 Inspections Required?

TM44 inspections are a legal requirement that must be carried out by a 3rd party organisations. Furthermore, as the replacement of refrigerant is restricted in older systems (as established in the F-Gas and the Ozone-Depleting Substances Regulations), there is an additional incentive to improve or replace older systems with more modern energy efficient units. It's important that building owners and facilities managers obtain essential information on air-conditioning efficiency, given how expensive comfort cooling is to run. The best guidance on how systems operate is, therefore, vitally important. The focus must be on assessing how well a system is maintained, controlled and operated and whether it is fit for purpose. Four key reasons for obtaining a TM44 inspection are:

- To improve the efficient use of air conditioning systems
- To reduce energy consumption associated with air conditioning
- To reduce operating costs
- To lower carbon emissions

'In a few days per year where the temperature is very high (over 28C) it can cost as much as a whole year's heating.' Carbon Trust, 2007.

#### Who Needs a TM44 Inspection?

All building owners and managers in the UK, whose air-conditioning systems meet the 12kW output criteria, are legally obliged to ensure compliance with TM44 regulations. Local Authority trading standards systematically check certifications, and officers have the power to issues fines for non-compliance. There are financial penalties for failing to have an air-conditioning report and certificate. A further penalty can be issued for failure to provide a copy of the air conditioning inspection report when requested to an officer of an enforcement authority within seven days.

#### What Does a TM44 Inspection Involve?

The inspection process examines all refrigeration equipment and air moving parts of the air-conditioning system, including their controls. On completion Green Zone Surveys will produce a report highlighting the current efficiency of your equipment, suggestions for improving the efficiency of your equipment, and any faults, as well as suggested actions on how to reduce your air conditioning use. These often provide tangible energy and running cost saving activities that require little or no capital expenditure. According to <a href="https://www.gov.uk">www.gov.uk</a>, based on your report, you will receive advice on the rectification of faults in the system that are impairing its efficiency. This will enhance existing systems to a standard of 'inherent' efficiency, consistent with the current minimum provisions of building regulations, or standards best practice improvement advice.

## How Often Are TM44 Inspections Required

TM44 Inspections are compulsory and legally required every five years. From April 2012, all TM44 reports have been lodged on the Government database where Enforcement Officers are able to check building compliance quickly and easily. In Scotland, the rules are slightly different, for example poorly maintained and inefficient systems must be re-inspected every 3 years.

An air conditioning report must be produced by an independent, accredited air conditioning energy assessor. Green Zone Surveys carries out assessments of all types of projects from simple one-off Level 3 systems to the most advanced Level 4 systems containing mechanical ventilation and high cooling capacities. Both Level 3 and 4 Air Conditioning Energy Assessors (ACEAs) are qualified to inspect air conditioning systems and submit Inspection Reports to their Accreditation Scheme, which in turn are lodged on the Government Register.

### Enhanced TM44 Report vs Standard TM44 Report -

In addition to the recommendations in a standard TM44, an enhanced report provides potential annual savings per recommendation. The overall cooling and mechanical plant are given an energy rating to show how efficient the plant is for the building. The individual chillers, split systems and AHUs are listed and given individual energy ratings as part of a breakdown. An asset register is provided as standard that includes refrigerant, charge, condition and output.

Equipment energy usage is provided along with weekly and annual running costs. This takes into account building occupancy and plant usage to show if plant is likely to be / is running while areas are unoccupied. The unit sizing's are compared to the areas they are located in to show if units are over / under sized.



## TR19 Cleaning and Remedials

Kitchen Extract Cleaning, TR19 Ventilation System Cleaning & Fire Damper Drop Testing

With the ever-increasing awareness of indoor air quality affecting an occupant's comfort and health and safety, the requirement to properly maintain the cleanliness of ventilation systems is of paramount importance. TR19 is the leading recognised standard for best practice of ventilation systems, under which kitchen extract is considered. For the purposes of TR19, a ventilation system for a kitchen is deemed to be any system which is intended to collect and remove contaminants, heat and moisture from a cooking appliance. It is this transfer of contaminants that builds up hazardous levels of grease over time, that poses a significant fire risk.

Green Zone Surveys offer 3 core services for TR19 Cleaning and Remedials.

### Why is Kitchen Ductwork Cleaning Required?

The procedure can broadly be broken down into three key reasons, each of which form an integral part:

#### 1. Fire Safety

TR19 guidelines highlight the current best practice for ensuring that kitchen extract systems are maintained to minimise the risk of fire associated with grease accumulation. The build-up of grease in an extract system forms a hidden combustion load. During the cooking process, flammable vapour is given off from cooking oils at temperatures between 200–300 degrees centigrade – a fire can occur when spontaneous ignition takes place at 310–360 degrees centigrade. The older the grease, the lower the ignition point hence why regular cleaning is of paramount importance. When grease ignites, fire spreads rapidly through the duct and can ignite surrounding materials along the ductwork path consequently transferring the fire. In effect, systems laden with grease can propagate from what started as a small kitchen fire to major building destruction.

#### 2. Food Hygiene

The build-up of grease also presents a hygiene hazard which can lead to foul odours and even pest infestation. If the system is not extracting at its full efficiency, in some cases, can lead to an unhygienic 'backwash' of air into the cooking area. COSHH (Control of Substances Hazardous to Health) require that sufficient steps are engaged to remove hazardous substances from the workplace.

#### 3. Insurance

Failure to have a TR19 cleaning can have wider implications should a fire occur. Some insurance providers can invalidate a claim due to failure to produce a valid TR19 certificate. It is advised that you check your policy to ensure you are covered.

### What are the Primary Fire Starters?

According to Local Fire Authorities and insurers, one of the most common causes of fire spread within commercial premises is the failure to remove combustible grease deposits from the cooking extract ductwork, by regular cleaning. Other fire starters include:

Cooking Appliances	Heating	Smoking	Electrical	Arson
57%	10%	7%	7%	5%

#### When is a Ductwork System Clean Required?

Depending on the ductwork's classification and usage levels, the requirements to carry out cleaning to desired levels will largely come down to how frequently the systems are running and the type of cooking carried out. The below table provides guidance on cleaning frequency:

1	Heavy Use	12-16 Hours Per Day	- 3 Monthly
2	Moderate Use	6 - 12 Hours Per Day	- 6 Monthly
3	Light Use	2 - 6 Hours Per Day	- 12 Monthly

#### What Process is Involved in Cleaning Ductwork?

Ductwork cleaning is a specialist contractor activity and should be carried out by an appropriately trained specialist. At Green Zone Surveys, we use a variety of different methods to achieve the required results from specialist mechanical brushes to air pressure systems and manual methods using specialist chemicals.

## How to Identify a System at Risk

If there are no access panels installed in the ductwork, then it is more than likely that the system has not been cleaned since installation. If this is the case, then it could be in violation of fire safety law and, ultimately, insurance claims may be declined. Furthermore, following a ductwork clean a report is provided. If you do not have a report, the chances are that an inspection has not been carried out.

As such, it is vital that a responsible person is appointed to carry out periodic system inspections. This ensures that the appropriate steps are taken to remove grease and ensure that fire risk is prevented.

### **TR19 Ventilation System Cleaning**

Ventilation systems are used to supply fresh clean air throughout a building. They control the temperature whilst ensuring the quality of indoor air. A good ventilation system removes harmful airborne bacteria, carbon dioxide, dust, moisture and smoke from the atmosphere. A broken or neglected ventilation system can have severe consequences on the quality of air within the building. Unfiltered air can contaminate an entire building, and can affect the health of the occupants.

#### What are the Benefits of Ventilation Cleaning?

- Clean and healthy air inside a building provides comfort and safety of the people within
- Reduction of the risks of such ailments as allergies, headaches, fatigue, catarrh, eye irritation, nausea,
- Ductwork channels are essential to the ventilation of buildings as they contribute to better indoor air quality irrespective of external weather conditions throughout the year.

Green Zone Surveys offer a full inspection to identify the condition of the systems. We then make recommendation regarding any cleaning or repair works required. Due to the systems being hidden away in ceiling voids etc. it is virtually impossible to know the condition of the system without a proper professional survey.

#### Fire Damper Drop Testing

Fire and smoke dampers are fitted in ductwork where it passes through a fire compartment barrier, for example at fire-rated walls and floors. They are designed to shut when a specified temperature or fire/smoke condition is met, preventing the spread of fire and smoke.

In the most common design, a fusible link holds a spring-loaded shutter open. When the temperature (typically 72° C) is reached the link 'fuses', or melts and the shutter drops to stop the passage of hot air and smoke. Many other designs are also employed including electrical systems that are linked.

Typical problems include blockages and obstructions, dirt and debris impeding a tight seal, corrosion and broken springs, poor installation or simply inadequate access to enable servicing to be carried out regularly.

This can be confusing since the British Standard calls for regular testing 'not exceeding 2 years'. It does however go on to require that spring-operated fire dampers – which are the most common – should be tested every 12 months. Environment factors play a part in how often you should test too. For example, a dusty environment will require more frequent checks and cleaning.

With this in mind, Green Zone Surveys can provide a full inspection of fire dampers to ensure they are working as intended in line with the British Standard.



# **Display Energy Certificates (DEC)**

Display Energy Certificates (DECs) promote the improvement of energy performance and form an important element of the Government's monitoring and management of energy strategy, raising awareness of the energy use in the building to visitors.

Part of the Energy Performance of Buildings Directive, DECs apply to public buildings, provide a rating from A (most efficient) to G (least efficient). This rating is based on a 12-month snapshot of the energy used.

#### What is a DEC?

A DEC is a numerical indication of how well a building is operating in terms of energy usage and subsequent carbon dioxide emissions from the associated energy types. This allows all types of energy usage to be brought together so it can be compared to other buildings, thus raising awareness and promoting energy improvement. The rating is based on the 12 months of energy used by the building and compared to a hypothetical building of a similar type (benchmark) whereby the best would be A rated to the worst at a G rating (typical performance being 100).

#### Which Buildings Require a DEC?

Buildings occupied in whole or partially by Public Authorities and frequently visited by the public are classified as Public Buildings. If the public building is greater than 1000m², a DEC and Advisory Report is required. The certificate should be updated every year in line with expiry dates and the Advisory Report should be held on file and updated every 7 years.

Under the latest guidance, a building between 250m<sup>2</sup> and 999m<sup>2</sup> should also be issued with a DEC, however, these are currently only required every 10 years.

Green Zone Surveys works closely with a variety of public authorities from Local, District and Town Councils to NHS Trusts, Central Government and Crown Estates.

### What's Involved In Producing The DEC?

The occupant will need to obtain actual energy usage to calculate an accurate DEC. Green Zone Surveys can assist in producing the DEC by carefully guiding you through the process. The data required for a DEC can be sourced through various sources, including:

- Meter readings
- The landlord or site representative's service charge details
- The utility supplier's bills

Green Zone Surveys can help overcome problems and ensure clients achieve compliance with the regulations. Recently this included developing a strategy across a large estate of properties which previously struggled to obtain this information due to complex metering and limited information from their landlords. By setting up new meter reading records and guiding staff, the client was able to complete their certificates.

#### Enhanced Inspections •

DECs also provide a route to Energy Savings Opportunity Scheme (ESOS) compliance for high volume building audits. During the first phase of ESOS, Green Zone Surveys produces DECs for many private organisations in addition to our full-scale building energy audits. Green Zone Surveys can also offer additional guidance on Display Energy Certificates and how you may achieve an improvement in your energy usage and, subsequently, a better DEC rating.

#### What Happens If You Fail To Have A DEC On Display And Advisory Report?

Failure to have a valid DEC on display in a prominent place clearly visible to the public carries a £500 fine. Failing to possess or have in control a valid Advisory Report can result in a further £1000 fine.



## **Energy Audits**

An energy audit, also known as an energy survey, is a review of your business's energy use to identify potential improvements that can reduce your energy consumption, energy costs and carbon emissions.

Through an energy audit, you can learn how to better manage your energy use and improve the efficiency of your operations.

### What is an energy audit?

A commercial energy audit is an assessment of a building or facility to identify opportunities to reduce energy use, lower carbon emissions and save money. Green Zone Surveys provide Level 1, 2 or 3 energy audits in compliance the methodology outlined in with ISO 50002 or BS EN 16247: 2012.

The audit is carried out by a qualified energy auditor and, depending on what level of audit is being carried out, can provide an analysis of the building's energy use, sources, systems and equipment. They can also look at how the building is insulated, how lighting and other electrical devices are used, and how other energy sources, such as gas, are managed.

The report will include a list of recommendations on how to improve the building's energy performance, allowing businesses to make informed decisions on what changes need to be made. A commercial energy audit is an important step in managing energy costs and ensuring that a business is taking advantage of all available energy-saving opportunities.

#### What are the difference in audit levels?

The level of energy audit depends on the needs of the business and range from benchmarking in Level 1 to the inclusion of vendor quotes for remediation in Level 3. Some of the outputs include:

- Level1
  - o Identification and basic evaluation of easily implemented low cost opportunities o ESOS: Action Plan and Energy Management Matrix
- Level 2
  - $o\, Detailed\, understanding\, of\, energy\, consumption\, and\, use\, from\, each\, energy\, source$
  - o Determination and analysis, including comprehensive savings calculation and preliminary investment costs, for capital measures
- Level 3
  - o Identification and analysis of energy saving opportunities, including no cost, low-cost and capital investment measures to include energy and non-energy benefits, preliminary equipment design or process improvement and detailed cost \ requirements

## What happens during an Energy Audit?

Commercial energy audits are undertaken by our experienced energy surveyors, who will identify and assess energy use within your business. The audit typically begins with a desk based analysis of your energy bills and load profile. Green Zone Surveys will then visit your building and conduct a walk-through survey, during which the auditor will take note of any inefficient lighting, HVAC systems, and insulation. They will also assess the building's envelope—windows, doors, and other openings that can let in or out air—to determine if the building is losing energy through these points. They will also review operational and management practices.

Once the walkthrough is complete and depending on the audit level, our auditor may suggest additional testing techniques such as thermal imaging, air tightness testing, or duct leakage tests to get a more accurate understanding of the building's energy use. After all of the data is collected, it is analysed to determine which areas of the building are using the most energy, and what changes can be made to improve efficiency. We will then produce a report that outlines the findings and suggests ways to reduce energy consumption.

## When should you have an Energy Audit? -

In general, it's a good idea to conduct a commercial energy audit every two to five years to ensure that your business is operating at maximum efficiency. You should also conduct one any time you make major changes or additions to the building or its systems, such as installing a new HVAC system or replacing windows. An energy audit can give you the information you need to make sound decisions and create a more sustainable business.



# Non-Domestic Energy Performance Certificates (EPC)

Broadly speaking, an Energy Performance Certificate (EPC) provides an indication of the energy performance of a building, in a similar way to the A-G ratings you find on any new household appliance. Whereby A+ or A is the most efficient type, due to high levels of insulation and highly efficient building systems, an For Grating signals a sub-standard performance. The rating itself is characterised by the building's age (fabric type, insulation levels and air tightness) and its services (heating, lighting, ventilation and hot water).

#### When Are EPCs Required?

There are numerous reasons a building may require an EPC, including:

- 1. The property is being bought, sold or leased under a new agreement (not including lease extensions or renewals)
- 2. New construction when a building is physically complete. Building Control would not be able to issue a certification of completion until an EPC has been lodged. This also includes any modifications to an existing building to include fewer or more parts and includes the extension of the fixed services (heating, lighting and ventilation) i.e. those services which benefit the occupants
- 3. The building seeks to obtain a Government subsidy for installing a low or zero carbon technology, such as Solar PV, Biomass Boiler or Air Source Heat Pump
- 4. To ensure compliance with Minimum Energy Efficiency Standards (MEES) Regulations for Non-Domestic buildings
- 5. As part of a corporate energy strategy

There will continue to be increasing pressures on improving the rating of EPCs for properties as the Government continues to work towards their Energy Reduction Agenda. Green Zone Surveys believes it is vital that clients are made aware of forthcoming regulations affecting their buildings and will provide regular technical updates.

#### How Often Are EPCs Required? -

The lodged EPC certificate is valid for 10 years from the nominated date on the certificate. However, with the increasing awareness of ratings, it may be beneficial to review previous EPC ratings as the regulations change and buildings undergo energy efficiency improvements or modifications. This is an active area of the marketplace as organisations seek to future-proof their properties for the forthcoming Minimum Energy Efficiency Standards (MEES).

#### What Does An EPC Inspection Involve? -

To prepare an EPC, the assessor carries out a site survey, or reviews the construction information, and determines various characteristics of the building and its services, including:

- 1. The construction of the building (e.g. fabric of the walls, roofs, floors and glazing.)
- 2. The type of use of the building, in terms of each area of the footprint, i.e. Office, Factory, Manufacturing, etc.
- 3. The heating, cooling, hot water and ventilation systems used for the relevant areas of the building
- 4. The lighting type and efficiency

This information is then correlated and modelled to provide the performance of the building in terms of a CO2 rating. Green Zone Surveys can also offer additional guidance on the Minimum Energy Efficiency Standards (MEES) procedures for those sub-standard buildings currently in the F and G ratings. We guide clients through these and other new regulations to future proof their buildings.

#### Who Carries Out The EPC Inspection?

An EPC must be produced by an accredited non-domestic energy assessor. Only accredited Energy Assessors can legally carry out EPC Inspections. Green Zone Surveys conducts assessments from one-off Level 3 buildings, such as high street shops, to the most complex Level 4 and 5 buildings with enhanced performance characteristics and complex footprints.

#### Who Needs To Provide The EPC Certificate & Recommendation Report?

It is the responsibility of the seller to ensure the EPC rating is prepared and lodged on the central Landmark Register prior to publishing marketing materials for the building/property. This would include any brochures or online pages.

#### What Happens If You Fail To Have An EPC Certificate & Recommendation Report? —

Local Authority trading standards officers have the power to check certification and issue fines for non-compliance. The penalty for failing to make available an EPC when required by the Regulations means you may be liable for a civil penalty charge notice. The value of these penalties in most cases is 12.5 per cent of the rentable value of the building. The range for penalties is currently fixed by a minimum amount of £500 and capped at £5,000.



# Water Hygiene Services Legionella

Legionnaires disease is a pneumonia-like illness caused by the Legionella bacteria growth found in water from natural lakes, rivers and reservoirs. It is important for building owners and employers to be aware that they also contaminate and grow in purpose-built water systems such as hot and cold systems found in buildings. The bacteria can affect all occupants, but it is more dangerous to people over 45, smokers or anyone with an impaired immune system. The symptoms can be severe and potentially fatal.

All water systems have the potential to be a source of Legionella bacteria growth. Under Health & Safety law, any person responsible for a building or an employer has a duty of care to ensure all necessary precautions are made to ensure the safety of the occupants. Therefore, correct management of the risk should be vital to any building's Health & Safety procedures.

### When is a Legionella Risk Assessment Required?

The first step towards the safety of water hygiene is to establish the potential risks and to ensure reasonable preventative action is taken. To ensure this, a Legionella Risk Assessment should be carried out. Green Zone Surveys have the competence and experience to undertake Risk Assessments to ACOP L8 standard, the most widely recognised standard by the HSE and Legionella Control Association (LCA). Typically, Legionella poses a risk to the health and safety of occupants in several types of water systems:

- 1. Hot and cold systems: Found in almost all buildings and can pose a significant risk.
- 2. Evaporative cooling systems: More commonly found in manufacturing or heavy industry. These usually comprise a cooling tower or evaporative condenser and can pose a significant risk if not correctly managed.
- 3. Spa pools: These leisure systems commonly found in hotels and health clubs are increasingly being identified as a source of infectious agents.
- 4. Other systems: Risk can vary in type and setting, from humidifiers to pressure washers. Even indoor ornamental fountains have been known to harbour contaminants.

#### What Process is Involved in a Legionella Assessment?

Legionella should be dealt with by someone with the necessary skills, knowledge and experience to control the issue. Green Zone Surveys work alongside clients to manage their Legionella from performing the initial Risk Assessments to setting up management systems for monitoring purposes through to remedial works to eradicate any high-risk situations. Green Zone Surveys undertakes its Risk Assessments in accordance with the guidelines to fulfil the following criteria:

- Management responsibilities regarding duty of care
- Identification of any potential sources of risk
- Assessment of any current controls in place to prevent this or detail measures to be actioned
- Reviewing details on the measurement, monitoring and maintenance procedures (either already in place or actioned in a plan)
- Arrangement for setting up a monitoring program for future inspection and checking
- Advising a review date for the next steps

#### Legionella Remedial Works

Whilst the process of setting up the risk assessment and management procedures will reduce the likelihood of a Legionella outbreak to a water system, the best course of action to eradicate the source can often require remedial actions to be taken. These can include some of the following:

- Tank refurbishment or replacement
- Removal of dead-legs (redundant pipework or water storage) to reduce unnecessary water capacity
- Fitting insulation to pipes or the water heater to reduce temperature loss within the system to achieve a safer temperature
- Service/replacement of thermostatic valves and pumps
- Disinfectants and clean down of whole water systems to remove contaminants

## What Happens If You Fail To Maintain Water Hygiene Standards To The Health and Safety Regulations Or ACOP L8?

Under general Health & Safety law, any person(s) responsible for a building has a duty to ensure all occupants are safe. If there is not an approved procedure in place to ensure the risk to contract Legionella is reduced, criminal proceedings could be pursued should an outbreak occur.



# **Energy Saving Opportunities** Scheme (ESOS)

The Energy Savings Opportunities Scheme (ESOS) is designed to analyse an organisation's energy consumption to identify ways in which they can reduce their energy usage for both the benefit to the environment and themselves. As the name suggests, significant cost savings can be achieved.

#### Who Falls Under ESOS?

If the organisation is a large undertaking, in terms of number of employees or turnover then they would qualify. A large undertaking is classed as:

- Employing more than 250 people; OR
- With an annual turnover of more than £44 Million and an annual balance sheet in excess of £38 Million.

In June 2023, the government extended the deadline for ESOS compliance by 6-months, from December 31st 2023 to June 5th 2024. The additional 6-months was provided to ensure all UK businesses have sufficient time to comply.

Compliance Period	Qualification Date	Compliance Period	Compliance Date
1	31 December 2014	From 17 July 2014 to 5 December 2015	5 December 2015
2	31 December 2018	From 6 December 2015 to 5 December 2019	5 December 2019
3	31 December 2022	From 6 December 2019 to 5 December 2023	5 June 2024
4	31 December 2026	From 6 December 2023 to 5 December 2027	5 December 2027

## What Type of Organisations Are Affected?

All qualifying UK businesses are affected by ESOS Phase 3. To date, Green Zone Surveys has helped thousands of organisations comply with the scheme. Below is a list of some of the organisations that may require an ESOS report:

- Limited Companies
- Private Companies
- Trusts
- Partnerships
- Universities which receive over half their funding from private sources
- Not-for-profit bodies which include large charities under a corporate body

#### Who Can Perform an ESOS Assessment?

You must appoint a Lead Assessor to check your ESOS assessment meets all requirements unless the organisation holds ISO 50001 certification. Green Zone was among the first organisations to hold the certification to conduct ESOS assessments.

#### What Does an ESOS Assessment Involve?

The procedure can broadly be broken down into several key stages, each of which form an integral part, with relevant controls ensuring they are effectively delivered:

- 1. Measure your total energy consumption. The sum total of all energy within the organisation, presented in a common unit of pounds of kWh from all the energy streams Combustible Fuels, Electricity, Renewable Energy and Heat.
- 2. Identify areas of significant consumption. Energy used in Buildings, Transportation and Manufacturing should all be considered where appropriate to determine the minimum 95% to be assessed. These can be grouped together in terms of either Group, Location, Activity or Fuel basis.
- 3. Consider all the available routes to compliance. There are several ways in which to comply with Phase 3 including ISO 50001, ESOS-compliant energy audits, Green Deal Audits and Display Energy Certificates (DECs). However, Phase 4 compliance will be limited to ISO50001 and ESOS-compliant audits.
- 4. Appoint a Lead Assessor. Details of the approved ESOS Register can be found online. Green Zone Surveys is approved to produce all types of ESOS assessment, from compliant audits to DECs and transport audits.
- 5. Have one or more board level director review and sign off the whole assessment.
- 6. Submit the notification of the assessment to the ESOS compliance register online.

### What Happens If You Do Not Comply With ESOS?

Organisations that fall under the large undertaking criteria of ESOS and do not fulfil the requirements, may be subject to enforcement from a failure to notify. This can result in a fine of £5,000, plus an additional £500 per day after the notification date. More significantly, not conducting the energy audits and reporting could result in fines of more than £50,000.



## **Other Services**

Green Zone Surveys have been providing building compliance and energy assessment services for over 12 years and have worked on some of the UKs most iconic buildings. As the preferred partner of many leading Facilities Management and HVAC companies, as well as businesses, customer satisfaction is always the number one priority.

In addition to core the product offerings, Green Zone Surveys are proud to offer further services to our clients.



#### Fire Risk Assessment

The Regulatory Reform (Fire Safety) order, also known as "The Fire Safety Order", came into force on 1st October 2006. The legislation applies across England and Wales, with Scotland introducing the 2005 Fire Act, sets out the requirements for UK businesses.

The Order requires that the responsible person (the person having control of the building, or a degree of control) takes reasonable steps to reduce the risk from fire and makes sure people can safely escape if there is a fire. This includes all people that might visit the premises. Almost all buildings, places and structures are covered except individual private homes. Private homes are family homes or individual flats in an apartment block. Communal areas in blocks of flats, maisonettes and houses of multiple occupation (HMOs) must also comply.

Green Zone Surveys work with the responsible person to ensure regulations are adhered to and any remediation is identified.



#### Radon •

Radon is an invisible, odourless, and tasteless gas, which is found in soil, rocks, and water. It is a naturally occurring radioactive gas that can seep up from the ground into homes, workplaces, schools, and other enclosed spaces.

Radon is the leading cause of lung cancer among non-smokers, second only to smoking itself. This means that if you are living or working in a building with high levels of radon, you could be at risk of developing serious health problems. That's why testing for radon is so important.

Public Health England produced a helpful Radon map to make it easier to determine if you live and work in a high risk area. Go to https://www.ukradon.org/information/ukmaps to check the postcode.

Green Zone Surveys can work with you to ensure you comply with regulations and take any appropriate remediation work.



## Asbestos Management Surveys

It is reasonable to assume that any buildings constricted or refurbished in any way prior to the year 2000 could feasibly contain asbestos in some form. It was a commonly used building material and can be found in all aspects of a building from its fabric, insulation, board materials and flooring, to name but a few.

Asbestos fibres are known to cause considerable harm to the human body, particularly lung-related conditions from the way in which the asbestos fibres are transferred to our body. As such, it is vital any persons responsible for managing a property must provide information on where any asbestos is to be found and what condition it is in.

Failure to properly manage and maintain asbestos regulations could ultimately result in court proceedings, usually a fine but, there have been instances of imprisonment for gross negligence.

Green Zone Surveys can provide assistance in surveying for asbestos and suggesting appropriate action to mitigate risk.

